ABSTRACT

In recent years, educational systems have become the target of widespread scrutiny and criticism, while at the same time the rewards of teaching are often obscured by the difficult working conditions that are prevalent in many of our schools. Against this backdrop of heightened job pressure and reduced professional satisfaction, it is not surprising that alarming statements have been issued repeatedly in the educational literature about the growing prevalence of teacher stress and burnout (e.g., Borg, 1990, Farber, 1991, Hodge, Jupp, & Taylor, 1994). Research has shown that teachers are exposed to a number of sources of stress. Kyriacou (2001) reports that the main sources of teacher stress stem from teaching students who lack motivation, maintaining discipline in the classroom, confronting general time pressures and workload demands, being exposed to a large amount of change, being evaluated by others, having difficult or challenging relationships with colleagues, administration, or management, and being exposing to generally poor working conditions.

It is asserted that the classroom is an organization or “a group of learners”, where the teacher is the leader or the leading learner. Change (1994) (stated by: McGoran, 2005) states that “a class of students and their leader are in nature a small organization that may be studied and managed by theories of organization and management”. As a matter of fact, not only school is a system (organization) but also, it is the most important organization in every country or in any time. In other organization if there were any problems in system the product of a system will decrease, but in a school system if there were any problems, learners (output) will be unhealthy and illiterate and these learners will spread in every other organization. In this system teachers have the most important role. Then, the study of their health (mental and physical) and the effect of exogenous variables like occupational stress and endogenous variables like emotional intelligence on their health are important. In other words, school is a system (organization). This system should produce healthy knowledgeable learners, and in this school system, teachers are the most important factor who has authority in the domain that explained for them. Then, their health (mental and physical), and the factors which have effect on it are so critical in the healthy school system.
RESEARCH OBJECTIVES

This study has seven primary objectives as follow:

1. Constructing and developing a most suitable valid and reliable Teachers Occupational Stress Questionnaire (TOSQ).
2. Determination of the effect of independent variables (Emotional Intelligence, Job Burnout, and Occupational Stress) on dependent variables (Mental and Physical Health) separately.
3. Study of the difference of the occupational stress score with consideration of gender, age, and nationality of the sample (Iran, and India).
4. Study of the difference of the emotional intelligence score with consideration of gender, age, and nationality of the sample (Iran, and India).
5. Study of the difference of the job burnout score with consideration of gender, age, and nationality of the sample (Iran, and India).
6. Study of the difference of the mental health score with consideration of gender, age, and nationality of the sample (Iran, and India).
7. Study of the difference of the physical health score with consideration of gender, age, and nationality of the sample (Iran, and India).

SAMPLE

The sample of this study is consisted of 500 teachers in school, 250 teachers from Iran schools (Tehran city), and 250 teachers from India (Aligarh city). At first 10 schools, in different parts of the city, and 25 teachers from each school is selected by random sampling. The range of the teachers’ age is 20 through 60, mean and standard deviation are (37.45, 8.75) respectively.

As shown, the sample is comprised of 282 (56.4) female teacher, and 218 (43.6) male teachers. Out of 282 female teachers, 123(24.6) are Iranian teachers, and 159(31.8) are Indian teachers. Also out of 218 male teachers, 127(25.4) are Iranian teachers, and 91(18.2) are Indian teachers.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Iran</th>
<th>India</th>
<th>Total</th>
<th>Iran</th>
<th>India</th>
<th>Total</th>
<th>Iran</th>
<th>India</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>123</td>
<td>159</td>
<td>282</td>
<td>24.6</td>
<td>31.8</td>
<td>56.4</td>
<td>24.6</td>
<td>31.8</td>
<td>56.4</td>
</tr>
<tr>
<td>Male</td>
<td>127</td>
<td>91</td>
<td>218</td>
<td>25.4</td>
<td>18.2</td>
<td>43.6</td>
<td>25.4</td>
<td>18.2</td>
<td>43.6</td>
</tr>
<tr>
<td>Total</td>
<td>250</td>
<td>250</td>
<td>500</td>
<td>50</td>
<td>50</td>
<td>100</td>
<td>50</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>
THE MASLACH BURNOUT INVENTORY (MBI)

The Maslach Burnout Inventory was used in order to measure the burnout among teachers in the present study (MBI, Maslach and Jackson, 1981). The MBI is consisting of 22 items that are divided into three subscales namely: emotional exhaustion, depersonalization, and personal accomplishment. Maslach and Jackson reported sufficient levels of reliability and validity for the inventory. In this research, as shown in below every subscale had had proper level of internal consistency (α coefficient):

<table>
<thead>
<tr>
<th>Subscales</th>
<th>Cronbach’s Alpha coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Exhaustion</td>
<td>0.7935</td>
</tr>
<tr>
<td>Depersonalization</td>
<td>0.7192</td>
</tr>
<tr>
<td>Personal Accomplishment</td>
<td>0.7532</td>
</tr>
</tbody>
</table>

EMOTIONAL INTELLIGENCE SCALE (E.I.S)

Developed and standardized by Singh (2004) consists of 60 statements. These 60 statements were grouped under five categories namely: Self Awareness, Self Regulation, Motivation, Social Awareness, and Social Skills. Higher score indicates high level of emotional intelligence in that respective area. He has reported sufficient levels of reliability and validity for the scale. In this research, as shown in below, every subscale and total scale had had proper level of internal consistency (α coefficient):

<table>
<thead>
<tr>
<th>Subscales</th>
<th>Cronbach’s Alpha coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Awareness</td>
<td>0.8155</td>
</tr>
<tr>
<td>Self Regulation</td>
<td>0.8480</td>
</tr>
<tr>
<td>Motivation</td>
<td>0.7712</td>
</tr>
<tr>
<td>Social Awareness</td>
<td>0.7585</td>
</tr>
<tr>
<td>Social Skills</td>
<td>0.7951</td>
</tr>
<tr>
<td>Emotional Intelligence Total</td>
<td>0.9378</td>
</tr>
</tbody>
</table>

MENTAL HEALTH INVENTORY

This scale was developed by Srivastava and Jagdish (1983), lower scores on the measure of mental-ill health has been supposed to indicate higher mental health. This scale is consist of 55 items based on 6 dimensions. They have reported sufficient level of reliability and validity for the inventory. In this research, as shown in below, total scale had had proper level of internal consistency (α coefficient):

<table>
<thead>
<tr>
<th>Total scale</th>
<th>Cronbach’s Alpha coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Health Total scale</td>
<td>0.8434</td>
</tr>
</tbody>
</table>
TEACHERS' OCUPATIONAL STRESS QUESTIONNAIRE (TOSQ)

In this research, the present researchers developed a questionnaire that has every psychometric property, for example: reliability and validity.

RELIABILITY

One of the most commonly used indicators of internal consistency is Cronbach's alpha coefficient. Ideally, the Cronbach alpha coefficient of a scale should be above 0.70. Cronbach alpha values are however, quite sensitive to the number of items in the scale. With short scale (e.g., scales with less than ten items) it is common to find quite low Cronbach values (e.g., 0.50). In this case it may be more appropriate to report the mean inter-item correlation for the items. Briggs and Cheek (1986) recommend an optimal range for the inter-item correlation of 0.2 to 0.4.

<table>
<thead>
<tr>
<th>Subscales</th>
<th>Cronbach Alpha coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working Load</td>
<td>0.8055</td>
</tr>
<tr>
<td>Physical Manifestations</td>
<td>0.7587</td>
</tr>
<tr>
<td>Problematic Future of Job</td>
<td>0.7047</td>
</tr>
<tr>
<td>Mental Exhaustion</td>
<td>0.7115</td>
</tr>
<tr>
<td>Poor Relationships</td>
<td>0.5147</td>
</tr>
<tr>
<td>Problems Related to Students</td>
<td>0.5852</td>
</tr>
<tr>
<td>Conflicting Demands of Work and Home</td>
<td>0.6140</td>
</tr>
<tr>
<td>Non Specific Tasks</td>
<td>0.5421</td>
</tr>
<tr>
<td>Total scale</td>
<td>0.8719</td>
</tr>
</tbody>
</table>

As shown, four factors have Alpha coefficient less than 0.70, because of they have less than 10 items then according to Briggs and Cheek's (1986) recommendation, mean of inter-item correlations is computed as an internal consistency. As it's indicated in below every subscale has enough inter-item correlations (0.2 to 0.4).

<table>
<thead>
<tr>
<th>Subscales</th>
<th>Mean of inter-item correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor Relationships</td>
<td>0.22</td>
</tr>
<tr>
<td>Problems Related to Students</td>
<td>0.27</td>
</tr>
<tr>
<td>Conflicting Demands of Work and Home</td>
<td>0.31</td>
</tr>
<tr>
<td>Non Specific Tasks</td>
<td>0.24</td>
</tr>
</tbody>
</table>

VALIDITY

CONTENT VALIDITY: In this research two items those hadn't proper level of content validity in specialists' opinion omitted, and then remaining items had enough content validity.
**CONVERGENT VALIDITY:** The correlation of the scores of the Teacher's Occupational Stress Questionnaire and job Burnout questionnaire considered as a convergent validity. Because of \((P<0.01\text{ or } P<0.05)\), every subscale and total scale correlation were significant, then developed Questionnaire showed acceptable level of convergent validity.

**PHYSICAL HEALTH**

In the present investigation, health checklist is provided as the requirements of this research work. In this research, Cronbach's Alpha Coefficient was 0.7151, and test-retest reliability with 3 weeks interval was 0.856. Then there was acceptable level of internal consistency.

**VALIDITY**

**CONTENT VALIDITY:** In this research all items of Physical Health checklist had sufficient level of accepted validity in the opinion of specialist.

**STATISTICAL ANALYSIS**

In this research the investigators used factor analysis for developing of Teacher's Occupational Stress Questionnaire (TOSQ) and multiple regressions for prediction of mental and physical health from occupational stress, job burnout, and emotional intelligence. For comparison of results between two countries (India and Iran) we used independent t-test and Mann-Whitney U test, and for comparison between more than two groups with one grouping variable one-way ANOVA and with two grouping variables two way ANOVA, and for testing of normality of distribution one sample Kolmogorov-Smirnov test is used. For determining the reliability Cronbach Alpha Coefficient and for validity Pearson correlation is used.

**OBTAINED RESULTS AND DISCUSSION**

Occupational stress and emotional intelligence have explained 42.2% of variance of emotional exhaustion (as a representation of job burnout) in total sample. In the regression, occupational stress was first important predictor \((\beta=0.638)\) and emotional intelligence \((\beta=-0.041, p=0.238>0.05)\) was not a significant predictor. Also, in Indian teachers' sample, occupational stress and emotional intelligence have explained 40.9% of variance of emotional exhaustion (as a representation of job burnout). Occupational stress was first important predictor \((\beta=0.638)\), and emotional intelligence \((\beta=-0.004, p=0.932>0.05)\) was not a significant predictor in Indian teachers' sample. Eventually,
occupational stress and emotional intelligence have explained 53.1% of variance of emotional exhaustion (as a representation of job burnout) in Iranian teachers' sample. Occupational stress was first important predictor ($\beta=0.716$), and emotional intelligence ($\beta=-0.061$, $p=0.171>0.05$), was not a significant predictor.

Altogether, results showed that Occupational Stress was a significant and important predictor for emotional exhaustion, but emotional intelligence was not. On the basis of the obtained results the important point that needs to highlight that: “these variables, especially occupational stress have explained 42.2% of variance of emotional exhaustion in total sample”. Then this variable is a critical effective variable in contributing of emotional exhaustion. However, school managements should look into the stress related problems being faced by the teachers and consider it as important factor that seems to affect teachers’ health in long run. Same results gained in second and third component of job burnout.

In the regression of mental health occupational stress, emotional intelligence, emotional exhaustion, and physical health have explained 53.7% of variance of mental health in total sample. In the regression, emotional exhaustion ($\beta=0.365$) was a first important predictor, emotional intelligence ($\beta=-0.355$), occupational stress ($\beta=0.182$), and physical health ($\beta = 0.121$) were second, third, and fourth important predictor, respectively. All of these predictors were significant. Also, these variables have explained 48% and 60.8% of variance of mental health in Indian and Iranians' sample respectively. In the Indians’ sample, emotional intelligence ($\beta=-0.435$), was a first important predictor, emotional exhaustion ($\beta=0.261$), occupational stress ($\beta=0.170$), and physical health ($\beta=0.079$) were second, third, and fourth important predictors, respectively. But, physical health ($p=0.131>0.05$) was not a significant predictor. In Iranians’ sample, emotional exhaustion ($\beta=0.335$), was a first important predictor, emotional intelligence ($\beta=-0.333$), occupational stress ($\beta=0.273$), and physical health ($\beta=0.140$) were second, third, and fourth important predictors, respectively. All of them were significant predictors.

However, results showed emotional intelligence was a significant negative predictor for prediction of mental health. That is, teachers who have reported themselves higher on emotional intelligence have better mental health. As a matter of fact, teaching and being teacher will produce hard and inexplicable conditions which nobody can
tolerate them. Then, in recruitment this variable should be taken into consider as an important psychological characteristic along with testing of candidates’ knowledge who want to enter in teaching profession. In the regression with second and third component of burnout, approximately same results are obtained.

In the regression of physical health, occupational stress, emotional intelligence, emotional exhaustion, and mental health have explained just 19.1% of variance of physical health in total sample. In the regression, mental health ($\beta=0.211$), was a first important predictor, occupational stress ($\beta=0.208$), emotional intelligence ($\beta=-0.110$), and emotional exhaustion ($\beta=0.014$) were second, third, and fourth important predictors, respectively. But emotional exhaustion ($p=0.810>0.05$) was not a significant predictor. Also, these variables have explained 14.5% and 21.2% of variance of physical health in Indian and Iranians’ sample, respectively. In Indians’ sample, occupational stress ($\beta=0.198$) was a first important predictor, emotional intelligence ($\beta=-0.137$), mental health ($\beta=0.131$), and emotional exhaustion ($\beta=0.012$) were second, third, and fourth important predictors, respectively. But just occupational stress ($p=0.025<0.05$) was a significant predictor, and the rest of predictors were not. In Iranians’ sample, mental health ($\beta=0.282$), was a first important predictor, occupational stress ($\beta=0.136$), emotional intelligence ($\beta=-0.085$), and emotional exhaustion ($\beta=0.049$) were second, third, and fourth important predictors, respectively. But just mental health ($p=0.002<0.05$) was a significant predictor, and the rest of predictors did not emerge as significant predictors in the prediction of teachers’ physical health. However, results showed mental health, occupational stress, and emotional intelligence were important factor in prediction of physical health in total sample. While occupational stress and emotional intelligence were important factors in prediction of mental health. Then, the importance of emotional intelligence (as a person’s characteristic) and occupational stress (as an environment condition) is proved in teachers’ physical health. In the regression with second and third component of burnout approximately same results are obtained.

**OCCUPATIONAL STRESS AND DEMOGRAPHIC VARIABLES**

- **COUNTRY:** Just in “Poor Relationships” subscale there were not significant differences between the Indian and Iranian teachers. Iranian teachers have had higher scores in the rest of subscales and total scale in comparison with Indian teachers. That is,
Iranian teachers are under higher stressors. So many factors are engaged in such
differences, but maybe, personality and cultural factors are most important. There are
obvious differences between the personality traits of Indian and Iranian teachers (people);
most important of them is patience. Indian teachers (people) are very patient in
comparison with Iranian teachers (people). They are not in hurry to their work and also
showed satisfaction with their present position. But Iranian teachers (people) are exactly
vice versa. They want to gain everything very fast, do the work very soon, have big
wishes in their mind and want to meet them very soon.

• GENDER: In this research in Indian teachers’ sample women teachers had
greater scores in Physical manifestations (p=0.0005<0.05), and “Mental exhaustion”
(p=0.031<0.05). In the other factors and total scale there were not any significant
differences. In Iranian teachers’ sample just in “Poor relationships” (p=0.379>0.05), and
“Non specific tasks” (p=0.552>0.05) there were not any significant differences, in the
other factors and total scale men teachers had greater scores.

In every culture and country, women usually have more delicate morale in
comparison with men. They are more sensitive to their personal beautiful appearance and
health. They consider and ask about minor changes in physical and mental health.
However, higher scores in “physical manifestations” and “mental exhaustion” that
occurred in Indian teachers are expected. In other words, it is a natural difference
between men and women. But, additionally, in Iranian culture every responsibility related
to live and family are undertake of men. Then higher scores in reported occupational
stress and its subscales are not strange. Even, when questionnaires were administered the
inflation was in highest rate in comparison of previous years, and it was going to go
higher, especially in Tehran city. However, inflation is not semplice factor in significant
differences which results showed in consideration of country and gender.

• AGE: In this research in total sample just in “problematic future of job”
subscale there was significant difference by consideration of age group. In other words,
old group teachers have reported greater scores in this subscale in comparison with young
teachers. Usually, more than 45 years old is the last decade of teaching in teachers’ life,
and retirement age is forthcoming. Then, teachers are worry about the future of job,
future of their children, more difficult economic conditions, and etc. they comprise
themselves with their compeer friends and want to be more but the condition do not let them, mostly. However, they feel more stress in comparison of other age group teachers.

**EXPERIENCE:** In this research in all subscales except “mental exhaustion” there were significant differences with consideration of the year of experience. In all of them low experience group have reported the least scores in occupational stress and its subscales. In studied country (India, and Iran) getting a suitable job is very difficult for the candidates. Then, persons who found the job are so glad for this success for a few years, and they do not think about the work overload, future of job, and etc. however, they have reported low stress because they rescue from jobless conditions and pressers newly.

**EMOTIONAL INTELLIGENCE AND DEMOGRAPHIC VARIABLES**

- **COUNTRY:** Just in “Motivation” subscale Indian teachers have reported greater scores in comparison of Iranian counterparts. In other words, Indian teachers have more motivation with 99 percent confidence. In the other subscales and total scale there were not statistically significant differences.

- **GENDER:** In this research, in all subscales and total scale there were significant differences between male and female teachers. The results of two way ANOVA showed that just in Indian teachers there were such differences with consideration of gender. In Indian teachers male teachers reported significantly higher scores in emotional intelligence and its subscales in comparison with female. These results did not appear in Iranian teachers. In other words, Iranian male and female teachers have reported same level of emotional intelligence and its subscales. But, Indian male teachers reported themselves as higher emotional intelligent persons in comparison with Indian female teachers.

- **AGE:** In this research, just in “Motivation” subscale there was significant difference between two age groups. In other words, young teachers reported greater motivation in comparison with young adult teachers. Altogether, there were not any significant difference in emotional intelligence and its subscales with consideration of age groups for which the data was analyzed concerning to each country, separately.

- **EXPERIENCE:** In this research, in all subscales and total scale there were significant differences between emotional intelligence scores with consideration of work
experience. Low experienced teachers have reported higher scores in emotional intelligence and its subscales in comparison with middle experienced teachers. But there was not significant difference between old and young group. Then middle experienced teachers described themselves as low emotional intelligent persons.

**JOB BURNOUT AND DEMOGRAPHIC VARIABLES**

- **COUNTRY**: Just in positive meaning subscale of burnout namely “personal accomplishment” there was significant difference between the mean scores of two countries. In other words, Indian teachers have reported greater scores in “personal accomplishment” in comparison with Iranian counterparts. In emotional intelligence variable, also, they reported more motivation. However, more motivation with more personal accomplishment has conformity. But this high score just are related to male Indian teachers.

- **GENDER**: In this research just in positive meaning subscale of burnout namely “personal accomplishment” there was significant difference between the mean scores of female and male teachers. In other words, male Indian teachers have reported greater scores in “personal accomplishment” in comparison with female Indian counterparts. In Iranian teachers, male teachers have reported greater scores in negative meaning subscales, namely “emotional exhaustion”, and “depersonalization” in comparison to their female counterparts. It is expected that experiencing more occupational stress will produce more job burnout. However, the same reason is mentioned in higher occupational stress in the sample of male teachers is engaged in producing higher job burnout.

- **AGE**: In this research, just in “personal accomplishment” subscale there was significant difference with consideration of age group in total sample. In other words, old teachers have reported more personal accomplishment in comparison of the middle aged teachers. For finding out the causes of this difference, analysis was done taking into the consideration of country. The results showed that in Iranian teachers’ sample there were not any significant differences with regard to job burnout with consideration of age group. But in Indian teachers’ sample young teachers have reported lesser “depersonalization” in comparison of old teachers. However, it is expected that young teachers who have reported to experience less occupational stress, report less
depersonalization. The interpretation of this result is same as the interpretation of lower scores in occupational stress.

**EXPERIENCE:** In this research, in “personal accomplishment” subscale and “emotional exhaustion” there were significant differences with consideration of work experience. In other words, middle experience teachers have reported lower personal accomplishment and higher emotional exhaustion in comparison with low experience teachers. It is expected, because middle experience teachers have not that ardency which low experience teachers have, also, they can not feel that danger of losing of job which high experience teachers feel it. However, middle experience teachers have reported lower personal accomplishment and higher emotional exhaustion. Further analysis, also showed, these differences are found related to Indian teachers’ sample, and did not show any significant difference between mean scores with consideration of work experience.

**HEALTH (MENTAL & PHYSICAL) AND DEMOGRAPHIC VARIABLES**

**COUNTRY:** In this research, Iranian teachers have shown greater scores in physical health but there was not any significant difference in mean scores of mental health with considering country. In other words, Iranian teachers have reported poorer physical health in comparison of their Indian counterparts.

**GENDER:** In this research, there were not any significant differences between mean scores of mental and physical health with considering of gender. Two way ANOVA with considering of gender and country showed that Indian female teachers showed poorer physical health in comparison to that male Indian teachers.

**AGE:** In this research, results showed that there were not any significant differences with consideration of age group in mean scores of physical and mental health in total sample.

**EXPERIENCE:** In this research, there were significant differences in mean scores of mental health with consideration of work experience, but there were not significant differences in mean scores of physical health in the same independent variable. In other words, middle experienced teacher have reported greater mean scores in comparison of low and high experienced teachers. That is middle experienced teachers have reported poorer mental health. It was observed that middle experienced teachers who reported higher stress, report poorer mental health.